



**7 Cedars Casino**  
**Water Quality Monitoring Program**  
for the 7 Cedars Casino Public Water System  
EPA# 105300108

Updated March 2015

# Table of Contents

## 7 Cedars Casino Water System Sampling Plan

Monitoring Plan Summary.....	1
Total Coliform Rule .....	2
Sample Site Identification.....	4

## 7 Cedars Casino Water System Description ..... 6

## Contacts – Phone and Addresses.....7

## IOC, SOC, and VOC Contaminant Sampling Lists.....8

## 7 Cedars Casino Water System Location Map.....11

**Appendices containing additional information about your water quality monitoring program, water quality parameters, record keeping, sampling procedures, public notices of violation and evaluating testing results are located in the appendices to this document, titled “Appendices for Water Quality Monitoring Programs”.**

## 7 Cedars Casino Monitoring Program Summary

Constituent	Site #	Sample Quantity	Frequency	Next Sample Due Date
Coliform (40 CFR §141.21)	CA-03, 04, and 05, see schedule.	One	Monthly	1st week of the month. Record chlorine residual on lab slip.
Nitrate – Enterprise well (40 CFR §141.23(d))	CA-02E	One	Annual	Anytime between 01/01/15-12/31/15
Asbestos – Enterprise well (40 CFR §141.23(b))	CA-02E	One	Once during the first 3 years of the current 9 year compliance cycle.	Anytime between 1/1/20 – 12/31/22 unless a waiver is applied for and granted
IOCs – Enterprise well (40 CFR §141.23)	CA-02E	One	Every three years	Anytime between 1/1/17 – 12/31/19
VOCs - Enterprise well (40 CFR §141.24)	CA-02E	One	Quarterly until advised otherwise by EPA	1/1/15 - 3/31/15 7/1/15 – 9/30/15
SOCs - Enterprise well (40 CFR §141.24)	CA-02E	One	Quarterly until advised otherwise by EPA	1/1/15 - 3/31/15 7/1/15 – 9/30/15
Lead & Copper* (40 CFR §141.80)	CA-03, 04, 05, 14, 17, 19, 23, 26, 27, and 28.	Ten	Every six months	Anytime between 1/1/15 – 6/30/15
TTHM & HAA5 (Stage 2 Rule 40 CFR Part 141 Subpart V)	CA-17	One TTHM One HAA5	Annual	Anytime between 8/1/15 – 8/31/15

\* If you are no longer able to collect a lead and copper sample from a site listed in the Monitoring Program Summary, please contact your TUC to help identify a new sample site.

**NOTE:** EPA sampling requirements for IOC, VOC, and SOC are based on the Federal Analyte Lists shown on pages 8-10. Supply these lists to the laboratory doing the analysis. Washington/Idaho State lists do not always meet EPA requirements.

## Total Coliform Rule

Once each month one sample for total coliform bacteria must be collected from the designated sample site and delivered to the lab. This sample collection shall be done following coordination with the laboratory. The operator should make every effort to complete coliform bacteria sampling as early in the month as possible, as well as early in the week. This allows for the possibility of re-sampling, should that be necessary. Voluntary extra coliform samples should be taken at designated repeat sample sites. **Note: Chlorine residual must be measured and reported on the lab slip that is submitted to EPA.**

### Rotating Sample Sites

The 7 Cedars Casino water system has three routine coliform sample sites: CA-03, CA-04, and CA-05. Samples are to be collected from these sites as follows:

Site	Sampling Month
CA-03	January
CA-04	February
CA-05	March
CA-03	April
CA-04	May
CA-05	June
CA-03	July
CA-04	August
CA-05	September
CA-03	October
CA-04	November
CA-05	December

### Repeat Sample sites

The following sites have been chosen for repeat coliform sampling sites in the event of a positive sample.

CA-03:	Upstream:	CA-23
	Downstream:	CA-24
CA-04:	Upstream:	CA-25
	Downstream:	CA-26
CA-05:	Upstream:	CA-20
	Downstream:	CA-21

NOTE: EFFECTIVE THROUGH MARCH 31, 2016 - If a routine coliform bacteria sample is positive, at least four follow up samples must be taken for each positive sample. Therefore, for each sample site that has a positive result, re-sample the positive site and collect samples from the upstream site and the downstream site and collect one additional sample from the distribution system at a routine or repeat sample site. In addition, within 24 hours of being notified of the positive result, you must collect a raw water sample. Also refer to the Groundwater Rule section for source sampling requirements if a distribution system coliform sample is positive. The month following a positive routine or repeat sample, a total of five routine samples must be taken. Even if multiple routine or repeat samples were positive; take just 5 samples the following month. The five samples should consist of the regularly scheduled routine sample and additional samples collected at other routine or repeat coliform sample sites in the system in order to reach a total of five samples.

NOTE: EFFECTIVE APRIL 1, 2016 - If a monthly routine total coliform bacteria sample is positive, you must collect four follow-up samples within 24 hours of being notified of the positive result. These follow-up samples must be collected from the site with the positive sample result and from the associated upstream and downstream sites identified above. In addition, within 24 hours of being notified of the positive result, you must collect a raw water sample from each groundwater source in use at the time the total coliform-positive sample was collected. See Groundwater Rule section of WQMP for further information. If two or more samples are total coliform-positive you are required to complete a Level 1 assessment within 30 days after learning of the second total coliform-positive sample. You will not be required to collect five routine samples the month following a positive routine or repeat sample.

## O&M Chlorine Residual Monitoring:

The operations staff tests free chlorine residual each work day at:

Site	Location	Frequency
CA-02E	Finished water tap, water treatment room.	Daily
CA-03	Service sink, main kitchen	Daily

## Groundwater Rule

The Groundwater Rule requires that water sources be tested for E. coli bacteria within 24 hours of notification of a positive routine coliform distribution sample. Samples must be taken from each groundwater source in use at the time the total coliform positive distribution sample was collected and the test results submitted to EPA Region 10 as "Triggered Source Water Monitoring Results". Samples must be a raw non-chlorinated source sample. Be sure to label these samples as raw water samples, source water samples, well water samples or triggered source water samples. If the source sample(s) are negative for E. coli, then no further action is required under the Groundwater Rule.

If any ground water source sample tests positive for E. coli, you must **issue a boil water notice** and contact EPA and IHS for further directions as soon as possible but no later than 24 hours after learning of the positive E. coli result. A sample boil water notice is included as Template 1-1 in Appendix C. In addition, unless notified otherwise during your consultation with EPA, you must collect five new follow up samples from the well(s) that tested positive for the E. coli bacteria within 24 hours of being notified of the E. coli positive sample.

The following steps provide an action plan for Groundwater Rule response:

- 1) Upon receiving notice of a total coliform-positive distribution sample, immediately collect a total coliform sample for each well that was in service at the time the total coliform-positive distribution sample was taken (the lab will do an E. coli analysis if a sample tests positive for total coliform).
- 2) If a source sample is E. coli positive, **issue a boil water notice and** notify EPA and IHS as soon as possible but no later than 24 hours after learning of the positive E. coli result.
- 3) Unless notified otherwise during your consultation with EPA, within 24 hours of being notified of the E. coli positive sample, collect five new follow up samples from the well(s) that test positive for E. coli.

**NOTE:** If all source samples are E. coli negative, but some or all source samples are total coliform positive, no further action is required under the Groundwater Rule. However, the total coliform positive counts as a Total Coliform Rule violation and public notification is required.

**NOTE:** Triggered source water monitoring for the Groundwater Rule must be a raw non-chlorinated sample of whichever well or wells were in use at the time a total coliform-positive sample was collected. Raw water samples shall be taken after running the well for 5 minutes and using sample site CA-01E. Raw water samples are only collected in the event of a total coliform-positive sample in the distribution system. All other source samples must be finished water taken from CA-02E.

## 7 Cedars Casino Sample Site Identification

Site #	Sample Site Description	Sample Site Notes
CA-01	Inactive sample site designation	
CA-02	Inactive sample site designation	
CA-01E	Enterprise Lane well raw water sample site - sample tap in treatment room.	Represents Enterprise well raw source water.
CA-02E	Enterprise Lane well finished water sample site - sample tap in treatment room.	Represents Enterprise well treated source water.
CA-03	Service sink, main kitchen.	Routine coliform monitoring site. Lead and copper sample location.
CA-04	Service sink, Napoli Deli Kitchen	Routine coliform monitoring site. Lead and copper sample location.
CA-05	Bar sink (restaurant side), Totem Restaurant.	Routine coliform monitoring site. Lead and copper sample location.
CA-06 to CA-12	Inactive sample sites	These sample sites either no longer exist due to renovation or are not suitable for monitoring.
CA-13	East bar sink, Club Seven side	
CA-14	West bar sink, Club Seven side	Lead and copper sample location.
CA-15	East bar sink, casino side	
CA-16	West bar sink, casino side	
CA-17	Club 7 satellite bar sink	Lead and copper sample location. TTHM/HAA5 sample site, maximum residence time location.
CA-18	Club 7 satellite bar hand washing station	
CA-19	Server station sink, Totem service bar area	Lead and copper sample location.
CA-20	Casino side bar sink, Totem bar area	Upstream repeat coliform site for CA-05.
CA-21	Server station sink, Totem restaurant	Downstream repeat coliform site for CA-05.
CA-22	Salad kitchen hand washing sink	

CA-23	Server beverage station sink, Salish restaurant	Upstream repeat coliform site for CA-03. Lead and copper sample location.
CA-24	Dish pit hand sink, main kitchen	Downstream repeat coliform site for CA-03.
CA-25	Hand washing sink, Napoli Deli kitchen	Upstream repeat coliform site for CA-04.
CA-26	NW service bar sink, Napoli Deli	Downstream repeat coliform site for CA-04. Lead and copper sample location.
CA-27	North bar sink, Rainforest Lounge	Lead and copper sample site
CA-28	Employee break room sink, second floor.	Lead and copper sample site

**Coliform and Lead and Copper Sampling Notes:**

1) When sampling from single control faucets for coliform bacteria or lead and copper, the hot water supply valve should be closed so the sample is composed of cold water only.

2) When sampling for coliform bacteria, the faucet aerator should be removed and the fixture flushed and disinfected before sampling.

**3) When sampling for lead and copper, the faucet aerator should be left in place for sampling.** Samples should be collected from the cold water tap.

## 7 Cedars Casino Water System Description

<b>System Name</b>	7 Cedars Casino Water System.
<b>System Classification</b>	7 Cedars Casino system is a Non-transient non-community (NTNC) Water System.
<b>ID #</b>	EPA: 105300108
<b>Source Type</b>	<p>The 7 Cedars Casino Water System is supplied by 1 groundwater well, named well #2 Enterprise Lane. The Enterprise Lane well is located within a pumphouse at the back of the casino complex near the intersection of Corriea Rd. and Enterprise Lane. The Enterprise Lane well began providing water to the system July 2014.</p> <p>The previous production well #3 is located in a pit in the casino parking lot. The sanitary survey conducted in 2013 identified this well as not meeting EPA standards.</p>
<b>Population Served</b>	7 Cedars Casino System serves a maximum 50 employees per day and 400 customers for a total of 450 persons per day
<b>Service Connection</b>	The 7 Cedars Casino Water System presently has 1 connection.
<b>Treatment - Disinfection</b>	Disinfection is accomplished by hypochlorination.
<b>Treatment – Iron and Manganese</b>	A Eco Smarte proprietary treatment system is installed in the mechanical room in the casino to treat for iron and manganese. Well #3 had high levels of iron and manganese which required treatment to prevent staining of plumbing fixtures. The Enterprise Lane well has much lower levels of manganese. As of June 2014, it has yet to be determined if the Enterprise Lane well will require any iron or manganese treatment. The Eco Smarte treatment system is currently offline.
<b>Storage: Reservoir</b>	Storage is provided by a gravity storage tank located on the hill behind the casino. Total storage is approximately 210,000 gallons.
<b>Piping System</b>	Information about the construction materials, sizes, and locations of the distribution system piping is available on the system prints, and also in the O&M Manual.



## Contacts - Phone and Addresses

### IHS Olympic District Office

Sandy Redsteer, Tribal Utility Consultant  
Indian Health Service  
Olympic District Office  
4060 Wheaton Way, Suite E  
Bremerton, WA 98310  
Phone: 360-792-1235 ext. 114  
Email: [sandy.redsteer@ihs.gov](mailto:sandy.redsteer@ihs.gov)

### IHS Spokane District Office

James Earl, Tribal Utility Consultant  
Indian Health Service  
528 E. Spokane Falls Blvd. #302  
Spokane, WA 99202  
(509) 455-3561  
Email: [james.earl@ihs.gov](mailto:james.earl@ihs.gov)

### EPA Region 10 - Seattle

Lisa Jacobsen, Tribal Drinking Water Coordinator  
EPA Region 10 Drinking Water Unit  
1200 6th Ave Suite 900, (OWW-193)  
Seattle, WA 98101  
(206) 553-6917  
Email: [jacobsen.lisa@epa.gov](mailto:jacobsen.lisa@epa.gov)

Steve Bouck  
Data Management Technician (water samples)  
EPA Region 10 Drinking Water Unit  
1200 6th Ave Suite 900, (OWW-193)  
Seattle, WA 98101  
Phone: (206) 553-1089  
Fax: 206-553-1280 (fax sample data to this fax#)  
Email: [bouck.steve@epa.gov](mailto:bouck.steve@epa.gov)

### 7 Cedars Casino System Manager

Ron Sather  
Facilities Manager  
270756 Hwy 101  
Sequim, WA 98382  
(360) 681-6734

### 7 Cedars Casino System Operator

Ilan Jones  
Water System Operator  
1033 Old Blyn Hwy  
Sequim, WA 98382  
Cell (360) 477-8673  
Office (360) 683-4627

### Laboratory

Twiss Analytical  
26276 Twelve Trees Lane, Suite C  
Poulsbo, Washington 98370  
Ph: (360) 779-5141

**EPA Region 10**

**IOC, SOC, and VOC Contaminant Sampling Lists**

**Analytes in Analyte Group (IOC)\***

Analyte Code	Analyte Name
1010	BARIUM
1015	CADMIUM
1020	CHROMIUM
1024	CYANIDE
1025	FLUORIDE
1035	MERCURY
1036	NICKEL
1045	SELENIUM
1074	ANTIMONY, TOTAL
1075	BERYLLIUM, TOTAL
1085	THALLIUM, TOTAL
1094	ASBESTOS
1040	Nitrate
1041	Nitrite
1005	Arsenic

\* Often arsenic, nitrate and nitrite are listed as individual tests instead of with the IOC group because many water systems need to monitor these chemicals at a different frequency than the other IOCs.

### **Analytes in Analyte Group (SOC)**

Analyte Code	Analyte Name
2005	ENDRIN
2010	BHC-GAMMA (LINDANE)
2015	METHOXYCHLOR
2020	TOXAPHENE
2031	DALAPON
2032	DIQUAT
2033	ENDOTHALL
2034	GLYPHOSATE (ROUND-UP)
2035	DI(2-ETHYLHEXYL) ADIPATE
2036	OXAMYL (VYDATE)
2037	SIMAZINE
2039	DI(2-ETHYLHEXYL) PHTHALATE
2040	PICLORAM (TORDON)
2041	DINOSEB
2042	HEXACHLOROCYCLOPENTADIENE
2046	CARBOFURAN (FURADAN)
2050	ATRAZINE
2051	LASSO (ALACHLOR)
2063	2,3,7,8-TCDD (2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN)
2065	HEPTACHLOR
2067	HEPTACHLOR EPOXIDE
2105	2,4-D
2110	2,4,5-TP
2274	HEXACHLOROBENZENE
2306	BENZO(A)PYRENE
2326	PENTACHLOROPHENOL
2383	TOTAL POLYCHLORINATED BIPHENYLS (PCB)
2931	1,2-DIBROMO-3-CHLOROPROPANE (DBCP)
2946	ETHYLENE DIBROMIDE (EDB or 1,2 DIBROMOETHANE)
2959	CHLORDANE

### **Analytes in Analyte Group (VOC)**

Analyte Code	Analyte Name
2378	1,2,4-TRICHLOROBENZENE
2380	CIS-1,2-DICHLOROETHYLENE
2955	XYLENES, TOTAL
2964	DICHLOROMETHANE
2968	O-DICHLOROBENZENE
2969	P-DICHLOROBENZENE
2976	VINYL CHLORIDE
2977	1,1-DICHLOROETHYLENE
2979	TRANS-1,2-DICHLOROETHYLENE
2980	1,2-DICHLOROETHANE
2981	1,1,1-TRICHLOROETHANE
2982	CARBON TETRACHLORIDE
2983	1,2-DICHLOROPROPANE
2984	TRICHLOROETHYLENE
2985	1,1,2-TRICHLOROETHANE
2987	TETRACHLOROETHYLENE
2989	CHLOROBENZENE
2990	BENZENE
2991	TOLUENE
2992	ETHYLBENZENE
2996	STYRENE

## 7 Cedars Casino Water System Location Map

